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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/621,652	07/18/2003	Hiroaki Taniuchi	240580US0X	1043		
22850	7590 01/03/2006		EXAMINER			
OBLON, SPI	IVAK, MCCLELLAN STREET	MIGGINS, MICHAEL C				
-,	IA, VA 22314		ART UNIT	PAPER NUMBER		
			1772			

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	0.	Applicant(s)	10			
Office Action Summary		10/621,652		TANIUCHI ET AL				
		Examiner		Art Unit				
		Michael C. Mig	gins .	1772				
Period fo	The MAILING DATE of this communication app or Reply	ears on the co	ver sheet with the c	correspondence ac	idress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS ( 36(a). In no event, he will apply and will exp , cause the application	COMMUNICATION  owever, may a reply be tin  ire SIX (6) MONTHS from  n to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).				
Status								
1) 又	Responsive to communication(s) filed on <u>06 O</u>	ctober 2005.						
, —		action is non-f	inal.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)⊠	Claim(s) 1-25 is/are pending in the application.							
	4a) Of the above claim(s) <u>8-14 and 17-25</u> is/are withdrawn from consideration.							
5) 🗌	5) Claim(s) is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>1-7,15 and 16</u> is/are rejected.							
7)	7) Claim(s) is/are objected to.							
8)	Claim(s) are subject to restriction and/o	r election requi	rement.					
Applicat	ion Papers							
9) 🗌	The specification is objected to by the Examine	er.						
10)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the	drawing(s) be he	eld in abeyance. Se	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	·		-	•			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents	s have been re	ceived.					
2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the prior	rity documents	have been receive	ed in this National	l Stage			
	application from the International Bureau	u (PCT Rule 17	'.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	nt(s)							
1) 🔯 Notic	ce of References Cited (PTO-892)	4)	Interview Summary					
3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	5)   6)	Paper No(s)/Mail D  Notice of Informal F  Other:		O-152)			
I S Patent and 1	Frademark Office							

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### **DETAILED ACTION**

#### Election/Restrictions

1. Claims 8-14 and 17-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/18/05.

2. This application contains claims 8-14 and 17-25 drawn to an invention nonelected with traverse in Paper No. 3/18/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

## **REJECTIONS WITHDRAWN**

3. All of the objections and prior art rejections set forth in the non-final rejection of 6/8/05, pages 3-8, paragraphs 8-16 have been withdrawn.

## **REJECTIONS REPEATED**

4. There are no rejections repeated.

## **NEW REJECTIONS**

# Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3, 5-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borst (US 2726339) in view of Kanjiro et al. (JP 06-294897, cited by applicant).

Borst discloses a radiation shielding material comprising portland cement and at least one metallic material selected from the group consisting of iron, carbon steel and stainless steel in any of particulate, powder and fiber forms in the range of 10 to 70% or 20 to 50%, or 30 to 70% by mass (column 1, lines 15-20, column 4, lines 45-65 and column 8, lines 20-30) (applies to instant claims 1, 7 and 15-16). Borst also discloses a boron oxide neutron-absorbing material in a range of 0.025 to 10% by mass (column 6, lines 22-45) (applies to instant claims 5-6).

Borst fails to disclose calcium hydroxide in a range of 15 to 60% by mass.

Kanjiro discloses calcium hydroxide in a range of 15 to 60% by mass in a cement for a radiation shielding material (see abstract) for the purpose of providing improved safety (applies to instant claims 1-3).

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided calcium hydroxide in a range of 15 to 60% by mass in the radiation shielding material of Borst in order to provide improved safety as taught or suggested by Kanjiro.

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7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borst (US 2726339) in view of Kanjiro et al. (JP 06-294897, cited by applicant), as applied to claims 1-3, 5-7 and 15-16 above, and further in view of Stocker et al. (US 3002843).

Borst fails to disclose portland cement including blast furnace slag.

Stocker discloses portland cement including blast furnace slag (column 2, lines 25-45) in a radiation shielding material (column 1, lines 5-10) for the purpose of providing improved fire and heat resistance.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided portland cement including blast furnace slag in the radiation shielding material of Borst in order to provide improved fire and heat resistance as taught or suggested by Kanjiro.

#### ANSWERS TO APPLICANT'S ARGUMENTS

8. Applicant's arguments filed 10/6/05 have been considered but are moot in view of the new grounds for rejection set forth above.

#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is 571-272-1494. The examiner can normally be reached on 1:00-10:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**MCM** 

December 26, 2005

Primary Examiner
Art Unit 1772

Melaul c. Ag